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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/864,862	05/23/2001	Timothy E. Pearcy	12784.2US01 2070		
23552 7	10/06/2004		EXAM	EXAMINER	
MERCHANT & GOULD PC			LU, JIPING		
P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			ART UNIT	PAPER NUMBER	
	,	•	3749		
			DATE MAILED: 10/06/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

	A	0					
	Application No.	Applicant(s)					
Office Astis Comment	09/864,862	PEARCY ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jiping Lu	3749					
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with th	ne correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply b oly within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS e, cause the application to become ABAND	ne timely filed  I days will be considered timely.  Ifrom the mailing date of this communication.  ONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 15 J	luly 2004.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11	, 453 O.G. 213.					
Disposition of Claims							
4) Claim(s) <u>1-14</u> is/are pending in the application.							
4a) Of the above claim(s) 6 and 7 is/are withdo	4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.						
5)⊠ Claim(s) 9 is/are allowed.							
6)⊠ Claim(s) <u>1-2, 4-5, 8, 10-14</u> is/are rejected.	☑ Claim(s) <u>1-2, 4-5, 8, 10-14</u> is/are rejected.						
7) Claim(s) <u>3</u> is/are objected to.							
8) Claim(s) are subject to restriction and/o	or election requirement.						
Application Papers							
9) The specification is objected to by the Examine	er.						
10) The drawing(s) filed on is/are: a) acc	cepted or b) objected to by the	he Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance.	See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct		-					
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Off	fice Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea	ts have been received. ts have been received in Applie prity documents have been rece	cation No					
* See the attached detailed Office action for a list		eived.					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08	,						
Paper No(s)/Mail Date	6)						

### DETAILED ACTION

### Election/Restrictions

- 1. Applicant's election of Species I, claims 1-6 in the reply filed on 7/15/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- 2. Claims 6-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made with traverse in the reply filed on 7/15/2004. However, because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

# Claim Rejections - 35 USC § 103

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 1-2, 4, 10, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Copson (U. S. Pat. 2,859,534) in view of Levinson (U. S. Pat. 4,103,431).

Copson shows a method of lyophilizing material 13 comprising the steps of placing material to be processed in a chamber 10, creating a microwave field in the chamber, passing the water vapor through a condenser 18, stirring the microwave (via stirrer 10a) with a stirrer having arc inhibiting surfaces (See Fig. 1, left and right corner of 10a), and providing selected surfaces

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(at 14b) in the chamber with arc inhibiting surfaces. However, Copson does not teach the steps of varying temperature and pressure conditions and controlling the microwave power in response to the detected corona discharges. Levinson teaches a product drying method of varying temperature (by power control 2) and pressure (by pressure release means 10) conditions and controlling microwave power (by 1-3, 13) in response to the detected corona discharges (see col. 6, lines 29-58) same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the method of Copson with steps of varying temperature and pressure conditions and controlling the microwave power in response to the detected corona discharges as taught by Levinson in order to improve the drying efficiency.

5. Claims 5, 8, 11, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Copson (U. S. Pat. 2,859,534) in view of Levinson (U. S. Pat. 4,103,431) as applied to claim 1 above, and further in view of Takahashi (U. S. Pat. 4,764,102).

The drying method of Copson as modified by Levinson as above includes all that is recited in claims 5, 8, 11, 14 except for the step of shielding selected surfaces in the chamber from direct exposure to microwaves. Takahashi teaches a drying method with a step of shielding the selected surfaces (809) in the chamber (803) from direct exposure to microwaves (see Fig. 26) same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further provide the method of Copson with a step of shielding the selected surfaces in the chamber from direct exposure to microwaves as taught by Takahashi in order to obtain the uniform drying.

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# Allowable Subject Matter

6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 9 is allowed.

# Response to Arguments

8. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 703-308-2354. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jiping Lu

Primary Examiner
Art Unit 3749